



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

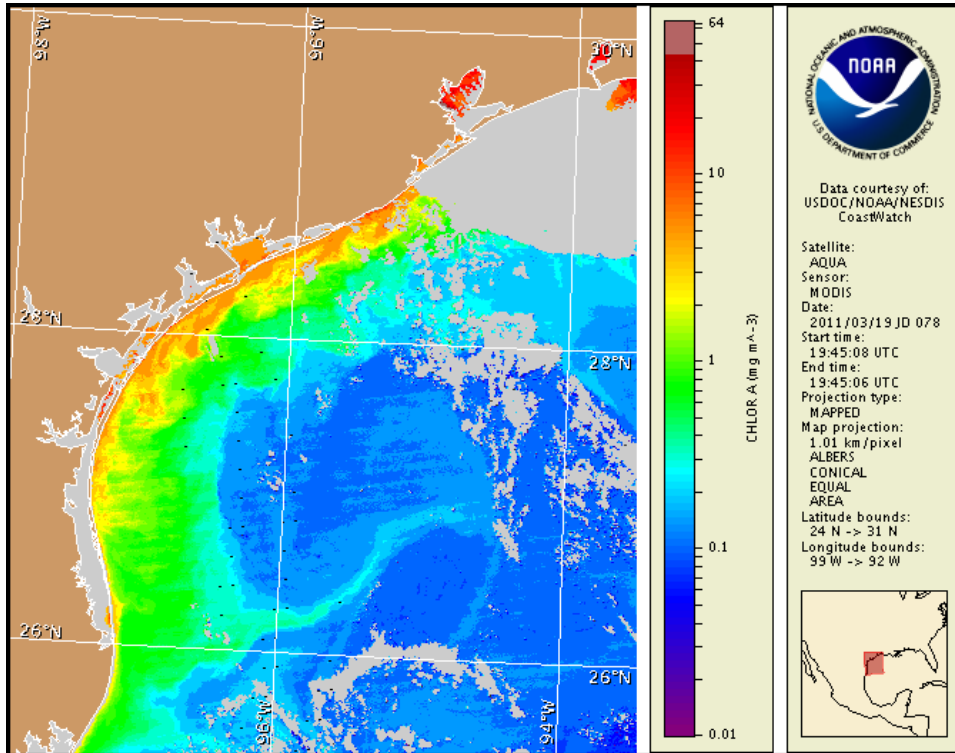
Monday, 21 March 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: March 14, 2011



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from March 12 to 17 shown as red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:
<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

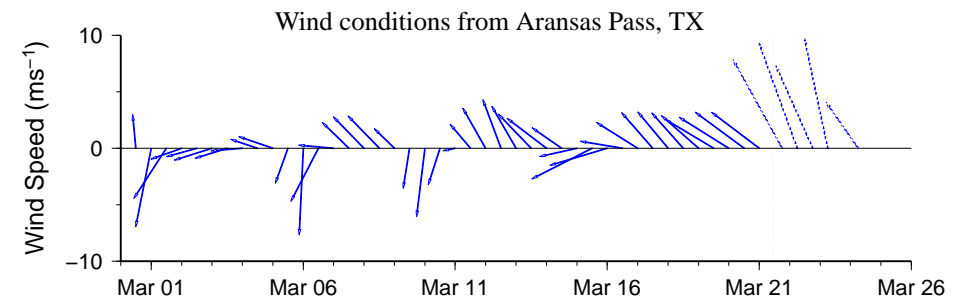
There is currently a bloom of the harmful algae, *Dinophysis*, around Corpus Christi and Aransas bays. This algal bloom does not produce respiratory irritation impacts associated with the Texas red tide caused by *Karenia brevis*. No respiratory irritation impacts are expected alongshore Texas today through Sunday, March 27.

Analysis

Blooms of *Dinophysis* are rare in the US, and we do not have a standard for monitoring with remote sensing. Imagery does not provide a useful reference for the blooms, but may aid in circulation patterns. Recent imagery is partially obscured by patches of clouds along the coast, north of the Galveston Bay region. Elevated chlorophyll (2-7 $\mu\text{g/L}$) is visible along- and offshore stretching from the Galveston Bay area to South Padre Island. Elevated chlorophyll seems to be due to the resuspension of benthic chlorophyll and sediments and is most likely not related to a harmful algal bloom.

Transport forecasts presume that the cells have moved in the Gulf of Mexico. We cannot forecast transport in the bays at this time. Forecast models indicate a negligible transport (< 10 km) along the coast from Port Aransas from March 19 to 23.

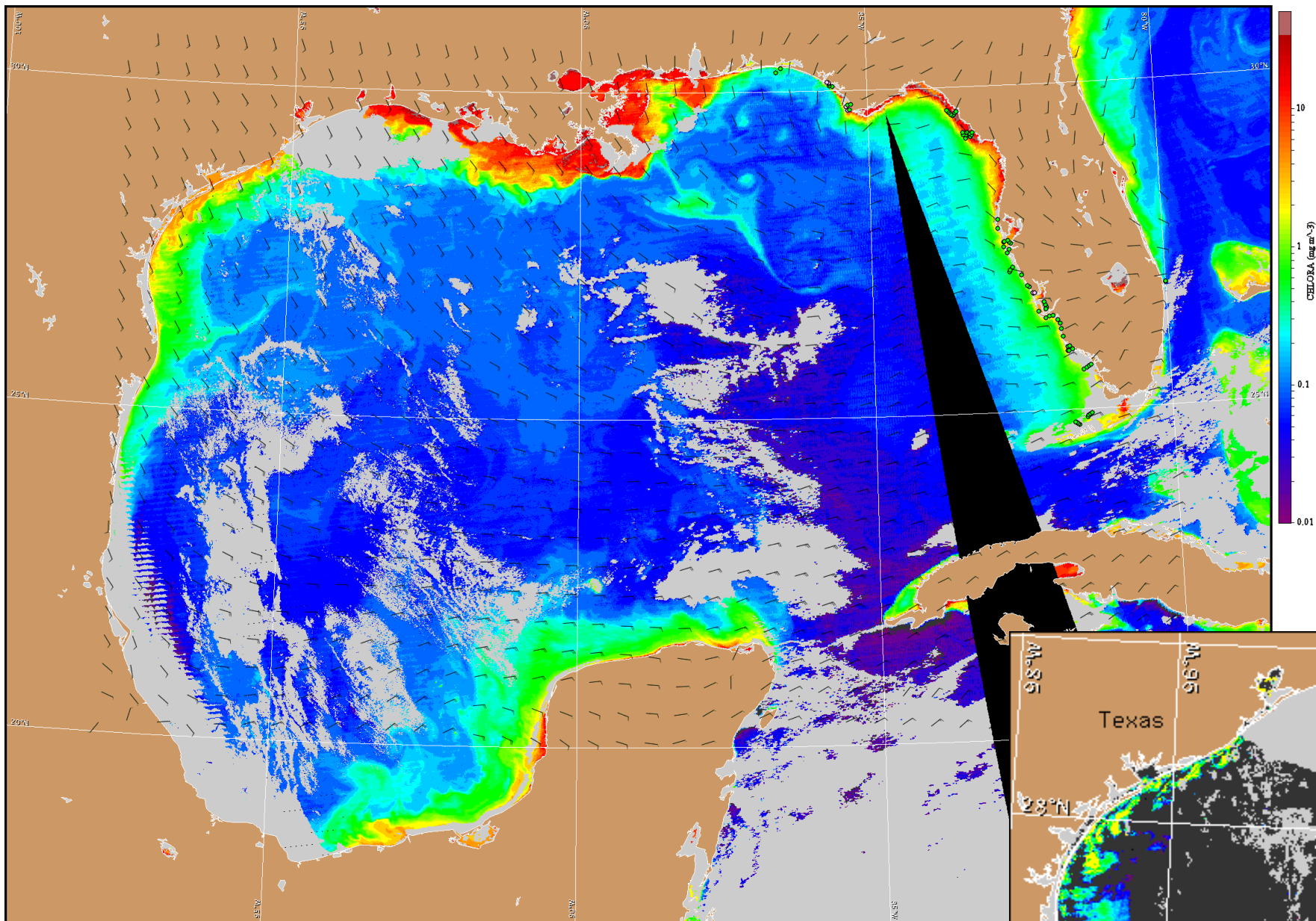
Kavanaugh, Derner



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

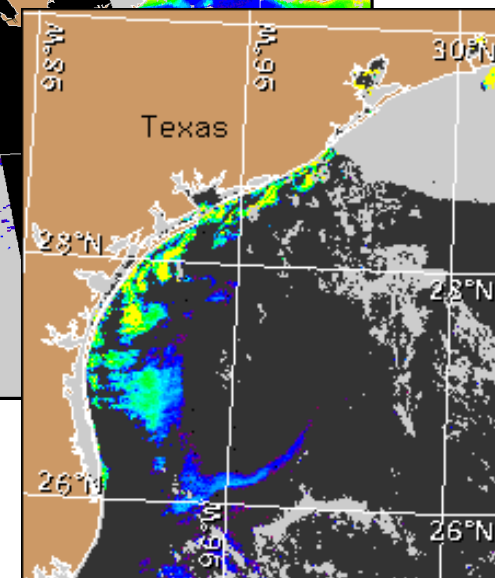
Wind Analysis

Port Aransas: Southeast winds (10-25 kn, 5-13 m/s) today through Friday.



Satellite chlorophyll image and forecast winds for March 22, 2011 06Z with cell concentration sampling data from March 12 to 17 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).